CC-chemokine receptor 2 with an affinity of at least about 0.1 x 10^{-9} M and inhibits binding of a ligand to the receptor.

57. (New) A method of treating a CC-chemokine receptor 2-mediated disorder in a patient, comprising administering to the patient an effective amount of an antigen-binding fragment of an antibody which binds to a mammalian CC-chemokine receptor 2 and inhibits binding of a ligand to the receptor, wherein the antigen-binding fragment inhibits binding of a ligand to the receptor.

Q43

REMARKS

Amendments to the Specification

The Specification has been amended to add the U.S. Patent No. for the parent application. No new matter has been added.

Claim Amendments

Claims 11-36 have been cancelled because they are drawn to a non-elected invention. Claim 8 has also been cancelled. Applicants reserve the right to pursue these claims in a divisional or continuation application as appropriate.

Claims 1-7, 9, 10 and 37-43 have been amended, and new Claims 44-57 have been added such that claims drawn to antigen-binding fragments are set forth separately from claims drawn to antibodies. No new matter has been added.

Rejection of Claims 1-10 and 37-43 Under 35 U.S.C. §112, Second Paragraph

Claims 1-10 and 37-43 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Examiner states that Claims 1-10 and 37-43 are vague and indefinite for recitation of "antigen-binding fragment". The Examiner states that the metes and bounds of the intended regions are not defined.

Applicants respectfully traverse this rejection. Applicants note that Claim 8 has been cancelled and Claims 1-7, 9-10 and 37-43 have been amended to remove reference to "antigen-

binding fragments". Instead, new Claims 44-57 have been added drawn to antigen-binding fragments, and Applicants will address the rejection with regard to new Claims 44-57.

An assessment of the claims under the second paragraph of §112 requires an analysis of whether the scope of the claim is clear to a hypothetical person possessing the ordinary level of skill in the art. In particular, such an analysis is performed in light of the content of the application, the teachings of the prior art and the claim interpretation that would be given by one possessing the ordinary level of skill in the art at the time the invention was made (MPEP §2173.02). If the language of the claim is such that a person of ordinary skill in the art can interpret the metes and bounds of the claim so as to understand how to avoid infringement, the claims are sufficiently definite within the context of 35 U.S.C. §112, second paragraph.

This is clearly the situation in the subject application. The Specification (page 15, lines 3-24) discusses antigen-binding fragments in detail. Moreover, "antigen-binding fragment" is a term of art, the metes and bounds of which is readily understood by one of ordinary skill in the art. As such, the ordinarily skilled artisan would understand the metes and bounds of the claims sufficiently well to determine whether a given composition infringed Claims 44-57 of the application, and the requirements of 35 U.S.C. §112, second paragraph, are satisfied. Reconsideration and withdrawal of the rejection are respectfully requested.

Rejection of Claims 1-10 and 37-43 Under 35 U.S.C. §112, First Paragraph

Claims 1-10 and 37-43 are rejected under 35 U.S.C. §112, first paragraph. The Examiner states that the Specification, while being enabling for antibody directed against the amino-terminal region of CCR2, does not reasonably provide enablement for any and all antibodies against all regions of CCR2. The Examiner asserts that the field of the invention is unpredictable and that the Specification does not provide adequate teaching for one of ordinary skill in the art to make or use the broad scope of the invention absent undue experimentation.

Applicants respectfully traverse this rejection. It is well-settled that the test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent application coupled with information known in the art without undue experimentation. *United States v. Telectronics, Inc.*, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988).

The fact that experimentation may be complex does not necessarily make it undue if the art typically engages in such experimentation. *In re Wands*, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988).

In the instant situation, Applicants have provided a substantial amount of guidance regarding how to make antibodies commensurate in scope with the claimed invention. The Specification describes the preparation of immunizing antigen and antibody production generally (page 13, line 24 through page 15, line 2) using well known methods, as well as describing the production of stable transfectants expressing CCR2 and use of these transfectants as immunogen (page 44, line 10 through page 49, line 8) to produce anti-CCR2 antibodies. The Specification further describes the screening procedures for identifying antibodies which selectively bind CCR2 from the supernatants produced by the immunization techniques (page 49, line 1 through page 50, line 14). The Specification further discloses the methods by which an anti-CCR2 antibody can be identified as inhibiting binding of a ligand to CCR2 (page 20, line 27 through page 22, line 19 and page 50, lines15-28). As a result of the procedures outlined in the Specification, Applicants identified two anti-CCR2 antibodies which inhibit binding of a ligand to CCR2. It is clearly no more than routine procedure for one of skill in the art to follow the well-known procedures described in the Specification to identify other antibodies which bind CCR2 and inhibit binding of a ligand to the receptor. The screening of even a large number of supernatants generated by an immunization protocol to identify antibodies having particular properties is clearly not undue experimentation, as such screening is practiced routinely in the art. In view of the fact that undue experimentation is not required to practice the invention commensurate in scope with the claims in view of the teachings of the subject application, it is clear that the claims are fully enabled by the disclosure. Reconsideration and withdrawal of the rejection are respectfully requested.

Rejection of Claims 1-10 and 37-43 Under 35 U.S.C. §112, First Paragraph

Claims 1-10 and 37-43 are rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the Specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors at the time the application was filed had possession of the claimed invention. The Examiner alleges that Applicants have only

disclosed antibodies that bind to the amino-terminal domain of CCR2, and that no other antibodies to other regions were disclosed.

Applicants respectfully traverse this rejection. It appears that the Examiner has improperly limited the alleged disclosure of the application to the working examples disclosed therein. Applicants acknowledge that the two working examples provided in the application relate to antibodies (1D9 and 8G2) which bind the amino-terminal domain of CCR2. However, it is incorrect to characterize the application as disclosing only these antibodies, as the application is replete with a broader description of Applicants' invention.

For original claims, there is a strong presumption that an adequate written description of the claimed invention is present when the application is filed. *In re Wertheim*, 191 USPQ 90 (CCPA 1976). Applicants note that the claims at issue were present not only at the filing of the subject application but were also the original claims presented upon the filing of the parent application. In addition, Applicants provide a clear description of one aspect of their invention as an antibody which binds CCR2 (page 10, lines 10-11) and inhibits binding of a ligand to the receptor (page 10, lines 27-28) and have reduced to practice two embodiments which meet all of the limitations, e.g., of Claim 1. Thus, it must be said that the Specification demonstrates that Applicants were in possession of the claimed invention at the time the application was filed. Reconsideration and withdrawal of the rejection are respectfully requested.

Rejection of Claims 1-8 and 37-42 Under 35 U.S.C. §101 (Double Patenting)

Claims 1-8 and 37-42 are rejected under 35 U.S.C. §101 as claiming the same invention as that of claims 2-4 of prior U.S. Patent No. 6,406,694 B1. The Examiner states that the claimed invention is directed to a product, and the already patented claims are also directed to the same product.

Applicants respectfully traverse this rejection. In the parent application (U.S. Serial No. 09/121,781), the Examiner issued a Restriction Requirement in which claims similar to Claims 1-8 and 37-42 of the subject application (i.e., Group I of the Restriction Requirement) were restricted from the claims present in U.S. Patent No. 6,406,694 B1 (Group III of the Restriction Requirement). It is noted that U.S. Patent No. 6,406,694 B1 is a divisional of parent application Serial No. 09/121,781. Thus, the Examiner has previously concluded that not only are Claims 1-

8 and 37-42 of the subject application *not* the same invention as Claims 2-4 of U.S. Patent No. 6,406,694 B1, the Examiner has in fact determined that these inventions are independent and distinct inventions. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Rejection of Claims 1, 9 and 10 Under 35 U.S.C. §101 (Double Patenting)

Claims 1, 9 and 10 are rejected under 35 U.S.C. §101 as claiming the same invention as that of claims 1, 13 and 14 of prior U.S. Patent No. 6,451,522 B1. The Examiner states that the claimed invention is directed to a product, and that Applicants have already received patent protection for the product.

Applicants respectfully traverse this rejection. First, Applicants note that all of the claims of U.S. Patent No. 6,451,522 B1are method claims, while Claims 1, 9 and 10 of the instant application are composition claims. Thus the Examiner's statement that Applicants have already received patent protection for the product is unclear with regard to this patent.

Moreover, in the parent application (U.S. Serial No. 09/121,781), the Examiner issued a Restriction Requirement in which claims similar to Claims 1, 9 and 10 of the subject application (i.e., Group I of the Restriction Requirement) were restricted from the claims present in U.S. Patent No. 6,451,522 B1 (Group IX of the Restriction Requirement). It is noted that U.S. Patent No. 6,451,522 B1 is a divisional of parent application Serial No. 09/121,781. Thus, the Examiner has previously concluded that not only are Claims 1, 9 and 10 of the subject application *not* the same invention as Claims 1, 13 and 14 of U.S. Patent No. 6,451,522 B1, the Examiner has in fact determined that these inventions are independent and distinct inventions. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Rejection of Claims 1-8 and 37-43 Under 35 U.S.C. §101 (Double Patenting)

Claims 1-8 and 37-43 are rejected under 35 U.S.C. §101 as claiming the same invention as that of claims 1-2, 4-6, 11-13, 15 and 30-38 of prior U.S. Patent No. 6,312,689 B1. The Examiner states that the claimed invention is directed to a product, and Applicants have already received patent protection for the same product.

Applicants respectfully traverse this rejection. According to the MPEP (§804):

> [a] reliable test for double patenting under 35 U.S.C. 101 is whether a claim in the application could be literally infringed without literally infringing a corresponding claim in the patent. *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970). Is there an embodiment of the invention that falls within the scope of one claim but not the other? If there is such an embodiment, then identical subject matter is not defined by both claims and statutory double patenting would not exist.

Clearly there are embodiments which would literally infringe one or more of Claims 1-8 and 37-43 of the subject application which would not literally infringe Claims 1-2, 4-6, 11-13, 15 and 30-38 of U.S. Patent No. 6,312,689 B1. An antibody which binds mammalian CCR2, inhibits binding of a chemokine to the receptor and inhibits one or more functions associated with binding of the chemokine to the receptor, but which binds a region of CCR2 other than the amino-terminal domain is an example of such an embodiment. This embodiment would literally infringe, e.g., Claim 1 of the subject application but not Claim 1 of U.S. Patent No. 6,312,689 B1. Thus, Applicants respectfully submit that statutory double patenting does not exist in this instance. Reconsideration and withdrawal of the rejection are respectfully requested.

Provisional Rejection of Claims 1 and 9 Under 35 U.S.C. §101 (Double Patenting)

Claims 1 and 9 are provisionally rejected under 35 U.S.C. §101 as claiming the same invention as that of Claims 1 and 6 of co-pending Application No. 09/840,459.

Applicants acknowledge the provisional double patenting rejection. However, Applicants request that this provisional rejection be addressed in the manner outlined by MPEP §822.01:

> The "provisional" double patenting rejection should continue to be made by the examiner in each application as long as there are conflicting claims in more than one application unless that "provisional" double patenting rejection is the only rejection remaining in one of the applications. If the "provisional" double patenting rejection in one application is the only rejection remaining in that application, the examiner should then withdraw that rejection and permit the application to issue as a patent, there by converting the "provisional" double patenting rejection in the other application(s) into a double patenting rejection at the time the one application issues as a patent.

This will permit Applicants to assess the rejection in view of the claims as ultimately indicated to be allowable, since it is possible that the claims may change during the course of prosecution.

Rejection of Claims 1-10 and 37-43 Under 35 U.S.C. §102(e)

Claims 1-10 and 37-43 are rejected under 35 U.S.C. §102(e) as being anticipated by Lind *et al.* (U.S. Patent No. 6,084,075; Reference AA). The Examiner states that the "product disclosed in the above cited patent appears to be identical or so similar that is [sic] indistinguishable from the product claimed by the applicants," and that "the disclosure of the above cited patent anticipates the claimed invention."

35 U.S.C. §102(e) states that a person shall be entitled to a patent unless the invention was described in, *inter alia*, a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent. 37 C.F.R. §1.131 states that when a claim of an application is rejected, the inventor of the subject matter of the rejected claim may submit an appropriate declaration to establish invention of the subject matter of the rejected claims prior to the effective date of the reference on which the rejection is based. The effective date of a U.S. patent is the earlier of its publication date or the date that it is effective as a reference under 35 U.S.C. §102(e). 37 C.F.R. §1.131 further provides that the showing of facts shall be such, in character and weight, as to establish reduction to practice prior to the effective date of the reference, or conception of the invention prior to the effective date of the reference coupled with due diligence from prior to said date to a subsequent reduction to practice or to the filing of the application. Applicants note that 37 C.F.R. §1.131 states that prior invention may not be established under this section if the rejection is based upon a U.S. patent to another which claims the same patentable invention as define in 37 C.F.R. §1.601(n).

The effective date of U.S. Patent No. 6,084,075 to Lind *et al.* is February 28, 1997, which is the U.S. filing date of the application on which the patent issued. Applicants note that the foreign priority date of the patent (March 1, 1996) cannot be relied upon as the effective date of the patent for purposes of §102(e) pursuant to MPEP §2136.03 and *In re Hilmer* 359 F.2d 859, 149 USPQ 480 (CCPA 1966).

Applicants are submitting concurrently a Declaration Under 37 C.F.R. §1.131 which demonstrates conception of the claimed invention prior to the effective date of U.S. Patent No. 6,084,075 coupled with due diligence from prior to said effective date to a subsequent reduction to practice. In accordance with accepted practice, the dates on the notebook records establishing conception of the invention accompanying the Declaration have been redacted. Thus, if the

Examiner determines that U.S. Patent No. 6,084,075 is not a patent claiming the same invention, the concurrently submitted Declaration is sufficient to antedate the cited reference, obviating the rejection.

Rejection of Claims 1-10 and 37-43 Under 35 U.S.C. §102(a)

Claims 1-10 and 37-43 are rejected under 35 U.S.C. §102(a) as being anticipated by Frade *et al.* (*J. Clin. Invest. 100*(3):497-502 (1997); Reference AU6).

35 U.S.C. §102(a) states that a person shall be entitled to a patent unless the invention was described in a printed publication in this or a foreign country before the invention thereof by the applicant for patent. 37 C.F.R. §1.131 states that when a claim of an application is rejected, the inventor of the subject matter of the rejected claim may submit an appropriate declaration to establish invention of the subject matter of the rejected claims prior to the effective date of the reference on which the rejection is based. 37 C.F.R. §1.131 further provides that the showing of facts shall be such, in character and weight, as to establish reduction to practice prior to the effective date of the reference, or conception of the invention prior to the effective date of the reference coupled with due diligence from prior to said date to a subsequent reduction to practice or to the filing of the application.

The effective date of Frade *et al.* is August 1, 1997, which is the publication date of the reference. Applicants are submitting concurrently a Declaration Under 37 C.F.R. §1.131 which demonstrates conception of the claimed invention prior to the effective date of Frade *et al.* coupled with due diligence from prior to said effective date to a subsequent reduction to practice. In accordance with accepted practice, the dates on the notebook records establishing conception of the invention accompanying the Declaration have been redacted. Thus, Frade *et al.* is not available as a reference against the subject invention under 35 U.S.C. §102(a). Reconsideration and withdrawal of the rejection are respectfully requested.

Rejection of Claims 1-10 and 37-43 Under 35 U.S.C. §102(a)

Claims 1-10 and 37-43 are rejected under 35 U.S.C. §102(a) as being anticipated by Frade *et al.* (*J. Immunol. 159*(11):5576-5584 (1997); Reference AT6).

35 U.S.C. §102(a) states that a person shall be entitled to a patent unless the invention was described in a printed publication in this or a foreign country before the invention thereof by the applicant for patent. 37 C.F.R. §1.131 states that when a claim of an application is rejected, the inventor of the subject matter of the rejected claim may submit an appropriate declaration to establish invention of the subject matter of the rejected claims prior to the effective date of the reference on which the rejection is based. 37 C.F.R. §1.131 further provides that the showing of facts shall be such, in character and weight, as to establish reduction to practice prior to the effective date of the reference, or conception of the invention prior to the effective date of the reference coupled with due diligence from prior to said date to a subsequent reduction to practice or to the filing of the application.

The effective date of Frade *et al.* is December 1, 1997, which is the publication date of the reference. Applicants are submitting concurrently a Declaration Under 37 C.F.R. §1.131 which demonstrates conception of the claimed invention prior to the effective date of Frade *et al.* coupled with due diligence from prior to said effective date to a subsequent reduction to practice. In accordance with accepted practice, the dates on the notebook records establishing conception of the invention accompanying the Declaration have been redacted. Thus, Frade *et al.* is not available as a reference against the subject invention under 35 U.S.C. §102(a). Reconsideration and withdrawal of the rejection are respectfully requested.

Rejection of Claims 1-10 and 37-43 Under 35 U.S.C. §102(a)

Claims 1-10 and 37-43 are rejected under 35 U.S.C. §102(a) as being anticipated by Lind *et al.* (WO 97/31949; Reference AN).

35 U.S.C. §102(a) states that a person shall be entitled to a patent unless the invention was described in a printed publication in this or a foreign country before the invention thereof by the applicant for patent. 37 C.F.R. §1.131 states that when a claim of an application is rejected, the inventor of the subject matter of the rejected claim may submit an appropriate declaration to establish invention of the subject matter of the rejected claims prior to the effective date of the reference on which the rejection is based. 37 C.F.R. §1.131 further provides that the showing of facts shall be such, in character and weight, as to establish reduction to practice prior to the effective date of the reference, or conception of the invention prior to the effective date of the

reference coupled with due diligence from prior to said date to a subsequent reduction to practice or to the filing of the application.

Applicants note that Lind *et al.* has an international filing date prior to November 29, 2000; thus, there is no effective date under 35 U.S.C. §102(e) for this reference. The effective date of Lind *et al.* is September 4, 1997, which is the international publication date of the PCT application. Applicants are submitting concurrently a Declaration Under 37 C.F.R. §1.131 which demonstrates conception of the claimed invention prior to the effective date of Lind *et al.* coupled with due diligence from prior to said effective date to a subsequent reduction to practice. In accordance with accepted practice, the dates on the notebook records establishing conception of the invention accompanying the Declaration have been redacted. Thus, Lind *et al.* is not available as a reference against the subject invention under 35 U.S.C. §102(a). Reconsideration and withdrawal of the rejection are respectfully requested.

Rejection of Claims 1-5 and 37-43 Under 35 U.S.C. §102(b)

Claims 1-5 and 37-43 are rejected under 35 U.S.C. §102(b) as being anticipated by Casselman *et al.* (*Journal of Laboratory and Clinical Medicine 126*(5):495-502 (1995); Reference U). The Examiner states that Casselman *et al.* teach an antibody against MCP-1 which showed that the antibody was capable of neutralizing MCP-1 activity. The Examiner alleges that the product disclosed in Casselman *et al.* is the same as the product claimed in the subject application, and that the binding capability of the claimed product does not carry any patentable weight. The Examiner further states that the cited product would inherently be able to have the same binding capability.

Applicants respectfully traverse this rejection. Claims 1-5 and 37-43 recite an antibody which binds CCR2. The Examiner correctly characterizes Casselman *et al.* as disclosing an antibody which binds MCP-1; there is no disclosure in the cited reference of any antibody which binds to CCR2. However, the Examiner is incorrect in asserting that the antibody disclosed by Casselman *et al.* would inherently have the binding capability of the claimed antibody. MCP-1 and CCR2 are different proteins having different primary and secondary structures, resulting in different antibody-binding epitopes. The ability of an antibody to bind MCP-1 is in no way

indicative of the ability of that antibody to bind CCR2, and the disclosure of an antibody which binds MCP-1 is *not* anticipatory of an antibody which binds CCR2.

The Examiner is also incorrect in equating intended use with binding capability and stating that neither carries any patentable weight. Clearly the recitation that an antibody "binds to" CCR2 is more than a recitation of mere intended use. The binding specificity of an antibody is one of the most fundamental identifying characteristics of the antibody and is not only a characteristic of the antibody but also a function of the primary and secondary structure of the antibody. Thus, it is clear that binding specificity does indeed carry patentable weight, and that Casselman *et al.* does not disclose an antibody with the requisite binding specificity. Accordingly, the cited reference does not anticipate the claimed invention. Reconsideration and withdrawal of the rejection are respectfully requested.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned at (978) 341-0036.

Respectfully submitted,

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Concord, MA 01742-9133
Dated: 5/8/03

MARKED-UP VERSION OF AMENDMENTS

Specification Amendments Under 37 C.F.R. § 1.121(b)(1)(iii)

Replace the paragraph at page 1, lines 3 through 5 with the below paragraph marked up by way of bracketing and underlining to show the changes relative to the previous version of the paragraph.

This application is a continuation of U.S. patent application Serial No. 09/121,781, filed July 23, 1998 (U.S. Patent No. 6,312,689), the entire teachings of which are incorporated herein by reference.

Claim Amendments Under 37 C.F.R. § 1.121(c)(1)(ii)

1. (Amended) An antibody [or antigen-binding fragment thereof] which binds to a mammalian CC-chemokine receptor 2, wherein [said] the antibody [or antigen-binding fragment thereof] inhibits binding of a ligand to the receptor.

2. (Amended) An antibody [or antigen-binding fragment] according to Claim 1, wherein [said] the antibody [or antigen-binding fragment thereof] inhibits one or more functions associated with binding of the ligand to the receptor.

3. (Amended) An antibody [or antigen-binding fragment thereof] according to Claim 1, wherein the mammalian CC-chemokine receptor 2 is a human CC-chemokine receptor 2.

4. (Amended) An antibody [or antigen-binding fragment thereof] according to Claim 1, wherein the ligand is a chemokine.

5. (Amended) An antibody [or antigen-binding fragment thereof] according to Claim 4, wherein the chemokine is selected from the group consisting of MCP-1, MCP-2, MCP-3, MCP-4 and combinations thereof.

6. (Amended) An antibody [or antigen-binding fragment thereof] according to Claim 1, wherein [said] the antibody [or fragment] is a monoclonal antibody [or fragment thereof].

7. (Amended) An antibody [or antigen-binding fragment thereof] according to Claim 1, wherein [said] the antibody [or fragment] is a human antibody [or fragment thereof].

9. (Amended) An antibody [or antigen-binding fragment thereof] according to Claim 1, wherein [said] the antibody [or fragment] is a humanized antibody [or fragment thereof].

10. (Amended) An antibody [or antigen-binding fragment thereof] according to Claim 1, wherein [said] the antibody [or fragment] is a recombinant antibody [or fragment thereof].

37. (Amended) A composition comprising an antibody [or antigen-binding fragment thereof] which binds to a mammalian CC-chemokine receptor 2, wherein [said] the antibody [or antigen-binding fragment thereof] inhibits binding of a ligand to the receptor, and an optional physiologically acceptable vehicle.

38. (Amended) An antibody [or antigen-binding fragment thereof] which binds to a mammalian CC-chemokine receptor 2, wherein [said] the antibody [or antigen-binding fragment thereof] inhibits binding of a ligand to the receptor with an IC_{50} of less than about 1.0 μg/ml.

39. (Amended) An antibody [or antigen-binding fragment thereof] according to Claim 38 wherein the IC_{50} is less than about 0.05 μg/ml.

40. (Amended) An antibody [or antigen-binding fragment thereof] which binds to a mammalian CC-chemokine receptor 2, wherein [said] the antibody [or antigen-binding fragment thereof]

inhibits binding of a ligand to the receptor, and wherein the antibody [or antigen-binding fragment] binds the receptor with an affinity of at least about 0.1×10^{-9} M.

41. (Amended) An antibody [or antigen-binding fragment thereof] according to Claim 40, wherein the affinity is at least about 1×10^{-9} M.

42. (Amended) An antibody [or antigen-binding fragment thereof] according to Claim 40, wherein the affinity is at least about 3×10^{-9} M.

43. (Amended) A method of treating a CC-chemokine receptor 2-mediated disorder in a patient, comprising administering to the patient an effective amount of an antibody [or antigen-binding fragment thereof] which binds to a mammalian CC-chemokine receptor 2, wherein [said] the antibody [or antigen-binding fragment thereof] inhibits binding of a ligand to the receptor.

44. (New) An antigen-binding fragment of an antibody which binds to a mammalian CC-chemokine receptor 2 and inhibits binding of a ligand to the receptor, wherein the antigen-binding fragment inhibits binding of a ligand to the receptor.

45. (New) An antigen-binding fragment according to Claim 44, wherein the antigen-binding fragment inhibits one or more functions associated with binding of the ligand to the receptor.

46. (New) An antigen-binding fragment according to Claim 44, wherein the mammalian CC-chemokine receptor 2 is a human CC-chemokine receptor 2.

47. (New) An antigen-binding fragment according to Claim 44, wherein the ligand is a chemokine.

48. (New) An antigen-binding fragment according to Claim 47, wherein the chemokine is selected from the group consisting of MCP-1, MCP-2, MCP-3, MCP-4 and combinations thereof.

49. (New) An antigen-binding fragment according to Claim 44, wherein the antibody is a monoclonal antibody.

50. (New) An antigen-binding fragment according to Claim 44, wherein the antibody is a human antibody.

51. (New) An antigen-binding fragment according to Claim 44, wherein the antigen-binding fragment is selected from the group consisting of an Fv fragment, an Fab fragment, an Fab' fragment and an $F(ab')_2$ fragment.

52. (New) An antigen-binding fragment according to Claim 44, wherein the antibody is a humanized antibody.

53. (New) An antigen-binding fragment according to Claim 44, wherein the antibody is a recombinant antibody.

54. (New) A composition comprising an antigen-binding fragment of an antibody which binds to a mammalian CC-chemokine receptor 2 and inhibits binding of a ligand to the receptor, wherein the antigen-binding fragment inhibits binding of a ligand to the receptor, and an optional physiologically acceptable vehicle.

55. (New) An antigen-binding fragment of an antibody which binds to a mammalian CC-chemokine receptor 2 and inhibits binding of a ligand to the receptor with an IC_{50} of less than about 1.0 μg/ml, wherein the antigen-binding fragment inhibits binding of a ligand to the receptor with an IC_{50} of less than about 1.0 μg/ml.

56. (New) An antigen-binding fragment of an antibody which binds to a mammalian CC-chemokine receptor 2 with an affinity of at least about 0.1×10^{-9} M and inhibits binding of a ligand to the receptor, wherein the antigen-binding fragment binds to a mammalian CC-chemokine receptor 2 with an affinity of at least about 0.1×10^{-9} M and inhibits binding of a ligand to the receptor.

57. (New) A method of treating a CC-chemokine receptor 2-mediated disorder in a patient, comprising administering to the patient an effective amount of an antigen-binding fragment of an antibody which binds to a mammalian CC-chemokine receptor 2 and inhibits binding of a ligand to the receptor, wherein the antigen-binding fragment inhibits binding of a ligand to the receptor.